

AMENDMENTS TO THE CLAIMS

1-14. (canceled)

15. (Currently amended) A process for working up a bottom stream comprising one or more high boilers and ionic liquid salts which are liquid at temperatures below 200⁰ C from an extractive rectification in which the ionic liquid is used as entrainer, which comprises feeding the bottom stream to an evaporation stage which is operated at a pressure of less than 500 mbar and in which the major part of the high boiler present is separated off in vapor form from the ionic liquid so that the high boiler content of the ionic liquid is reduced to concentrations of less than 5% by weight and subsequently feeding the worked-up ionic liquid to a stripper which is supplied with inert gas or superheated steam and ~~is-operated~~ operating at ambient pressure.

16. (Currently amended) A process for working up a bottom stream comprising one or more high boilers and ionic liquid salts which are liquid at temperatures below 200⁰ C from an extractive rectification in which the ionic liquid is used as entrainer, which comprises feeding the bottom stream to an evaporation stage which is operated at a pressure of less than 500 mbar and in which the major part of the high boiler present is separated off in vapor form from the ionic liquid so that the high boiler content of the ionic liquid is reduced to concentrations of less than 5% by weight and subsequently feeding the worked-up ionic liquid to a stripper which is supplied with inert gas or superheated steam and ~~is-operated~~ operating at a pressure of less than 900 mbar, ~~particularly preferably less than 500 mbar.~~

17. (Currently amended) A process for working up a bottom stream comprising one or more high boilers and ionic liquid salts which are liquid at temperatures below 200⁰ C from an extractive rectification in which the ionic liquid is used as entrainer, which comprises feeding the bottom stream to a stripper which is supplied with superheated steam comprising the a low boiler and

is operated at ambient pressure or at a pressure of less than 900 mbar

18. (Previously presented) The process according to claim 15, wherein air is used as inert gas for stripping.
19. (Currently amended) The process according to claim ~~18~~ 15, wherein dried inert gas is used for stripping.
20. (Previously presented) The process according to claim 15, wherein a dephlegmator is used at the top of the stripper to separate out high boilers still present.
21. (Currently amended) The process according to claim 15, wherein the evaporation in the an evaporator downstream of the an extractive rectification column is carried out by depressurization vaporization without additional introduction of heat.
22. (Currently amended) The process according to claim 15, wherein high boilers are discharged in vapor form via a side offtake on the an extractive rectification column.
23. (Currently amended) The process according to claim 22, wherein the side offtake used for separating off the high boilers is positioned in the a stripping section of the extractive column ~~close to~~ at the bottom, ~~particularly preferably at one of the three bottom-most theoretical plates, very particularly preferably at the bottom-most theoretical plate (bottom).~~
24. (Currently amended) The process according to claim 15, wherein the worked-up ionic liquid ~~obtained by means of the work-up~~ is recirculated to the an extractive rectification column.
25. (Previously presented) The process according to claim 15, wherein, when an evaporator is used, a liquid ring pump is used for compressing the vapors to ambient pressure, with the liquid ring pump being operated using ionic liquid as

ring liquid.

26. (Previously presented) The use of the process according to claim 15 for separating mixtures comprising polar and nonpolar materials which form azeotropes or are close-boiling.

27. (new) A process according to claim 23 wherein the side offtake is positioned at one of three bottom-most theoretical plates of the extractive column.

28. (new) A process according to claim 23 wherein the side offtake is positioned at a bottom-most theoretical plate of the extractive column.

29. (new) A process according to claim 16 wherein the operating pressure is less than 5mbar.